

How to create a CD which runs Portfolio Browser v4.x direct from the CD

V1.0

Who is this for?

This PDF is for anyone who wishes to know how to make a CD which AutoPlays Portfolio Browser on 32-bit Windows PCs - Win 9x, Win NT, or Win 2000. You don't need any programming skills other than the ability to follow the simple instructions in the document.

I've tested the principles in this document under Windows 98SE but in a similar project about running Acrobat Reader v4.x from CD, I've tested the same principles more widely across the suite of 32-bit Windows versions.

If you make active use of this document, it might be worth checking my site from time to time, for updates. I'll post the current document version on the download page.

This document is a small return for some of the help I've had from other folk online. If it helps you please return the favour by helping out someone yourself. Let me know how you get on. I'm always interested to hear what people have been empowered to do. You can find me at mark@yearley.demon.co.uk

Best wishes to all

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Creating an AutoPlay CD

This chapter is primarily devoted to making CDs AutoPlay on a Windows PC but there is a section at the end about Macs. For this you need the v4.x Portfolio Browser which is either on your Portfolio CD or can be found in the 'downloads' section of the www.extensis.com web site. To create the actual Catalog files you will need to use the full Portfolio v4 app.

How do I make a CD AutoPlay?

32-bit Windows (95, 98, NT 4) has the facility to 'AutoPlay' CDs that allows programs to be run as soon as the CD is inserted and read, without user intervention. To do this you must include a special file named `autorun.inf` in the root folder of your CD. The file name is recognised by the windows OS and the CD will 'AutoPlay' according to the information supplied. (The root folder is the highest level folder of your CD's file layout - in Explorer a file in the root folder of a drive does not appear as being in a folder at all, but the drive's icon.)

The `autorun.inf` file allows you to specify the path of the application to run and, if command line arguments are accepted, the file to open. Additionally, an icon can be specified which will show instead of the CD drive icon in Explorer and Windows folders when the CD is mounted. The `.INF` file is a basic text file that may be created using Notepad and consists of 3 lines of information:

```
[autorun] (required heading)
open=      (+ path to program.exe and optional command line)
icon=      (name of icon (.ICO) file in root folder, or defaulticon= if file is elsewhere)
```

Note: the paths (to files) that you put in the `open=` and other statements are subtly different to the way you normally write them for Windows programs. In the `autorun.inf` when referring to files on the CD you always omit both the drive letter and backslash preceding the first folder names. If your CD does not AutoPlay properly and Windows reports it can't find your chosen file, this is the first thing to check. Leaving the drive letter out is actually sensible as the CD's drive letter will depend on, at least, the number of hard drives/partitions on the user's PC.

How do I get my AutoPlay CD to run Portfolio Browser when the CD is inserted?

The example below is for an `autorun.inf` file which will AutoPlay Browser and in turn open a PDF. The explanations that follow it explain any assumptions about what folder and filenames you should use in your file layout.

You can create the file easily using Windows' Notepad. Open Windows Notepad, then cut and paste the text shown below between the hash marks into the Notepad file and 'Save As' with the name 'autorun.inf'. Ensure this file is included in the root (top level) folder of your CD when you burn it.

```
#####
[autorun]
```

```
open=portbrws\portbrws.exe catalog\mycat.fdb
defaulticon=portbrws\portbrws.exe, 0
####
```

Notes:

1. The paths have **no** backslash (\) preceding the first folder or file name, either for the executable (program) file or for the content file to be run by the program .)
2. Don't worry about upper and lower case in these statements. Win 9x is not case sensitive in this context.
3. Notice there is a single space character between the path the program executable and
4. An EXE file may contain more than one icon and they are numbered starting from zero not 1. In Portfolio Browser, 0 = Application icon, 1 = Catalog Icon.

The 'open' statement.

This statement calls the program file and optionally as here a content file. The example thus calls Portfolio Browser in folder [CD drive]:\portbrws\ and uses it to automatically open the Catalog file 'mycat.fdb' in folder [CD drive]:\catalog\. So, once the user places the CD in the drive and it is read, they will see the Catalog file 'mycat.fdb' appear on screen automatically.

To run 'mycat.fdb' from the '\portbrws\' folder, the syntax would be

```
open=portbrws\AcroRd32.exe portbrws\mycat.fdb
```

Simple paths like this work fine. If you use long (over 8 letters) file and folder names or include spaces, periods etc - e.g. \Portfolio 4.0\ and things are slightly more complicated. If you need to use such a naming system you need to put double quotes (") around each statement. For example:

```
open="Portfolio 4.0\portbrws.exe" "Portfolio 4.0\mycat.fdb"
```

Note that if using 'open=' to call the exe and a file, each string has its own open/close quotes and there is a space between each string.

At this point, you may see that to save yourself a lot of hassle there is much sense in sticking with simple folder names with just 8 letter or number characters. My experience is you use more fancy naming - which you may feel is more user-friendly - at your peril.

Do bear in mind that the autorun.inf's command syntax is subtly different to that used with either Windows shortcut (.LNK) files or the Windows Start->Run command. These differences can catch you (indeed they were the cause of errors in the initial release of this document, corrected here). So don't use these other methods to test the correctness of your autorun path strings as most likely you will get caught out. I'll talk below about AutoPlaying hard drives for test purposes.

The 'icon' statement.

```
defaulticon=portbrws\portbrws.exe,0
```

This statement is optional and tells windows what graphical icon to show in Explorer for the CD drive when your CD is mounted. In our example, to save creating an icon we use one of the icons embedded in the Browser application. The notation",0" at the end of the example line above is to indicate we wish to use icon #1 (icons number upwards from 0 as far as Windows is concerned). Browser has 5 embedded icons; #1 = Portfolio application, #s 2 and 5 = Portfolio file.

If you have ready made icon of your own, place it in the root of the CD and replace the defaulticon line with:

```
icon=myicon.ico
```

If you know a little bit about graphics you can have a go at making your own icons, otherwise the quick way to get a professional looking result is to use Browser's icons as described.

Extending the functionality of Autorun.inf

There are also some extensions to the autorun.inf file you can use that will put shortcuts on the right-click menu of CD's icon. For example, add this to your autorun.inf (below the icon= line):

```
shell\read\command=notepad.exe readme.txt  
shell\read=Read M&e First
```

The CD icon right-click menu will have a new item, "Read Me First" (with E as a hotkey) that launches Notepad with the readme.txt from the CD loaded. The ampersand (&) character in the second line denotes the hotkey letter, which is underlined in the menu. So Rea&d Me First would make 'D' the hotkey, and the menu item would appear as "Read Me First". If you use hot keys (you don't have to), do ensure that the letter you wish to use isn't already assigned to a standard Windows context menu choice, such as Copy, Properties and Rename. The first listed menu entry for any hotkey gets executed.

As for the open command, you can give a path to the file you wish to open (note as for the 'open=' and 'icon=' lines, no leading backslash is used):

```
shell\read\command=notepad.exe mydocs\readme.txt
```

You can add more than one such context menu shortcut by tweaking the 'read' verb:

```
shell\read1\command=notepad.exe readme.txt  
shell\read1=Read M&e First  
shell\read2\command=notepad.exe EULA.txt  
shell\read2=Read My E&ULA
```

This adds "Read Me First" and "Read My EULA" items to the CD's right-click context menu. Items are added in the order they are in the autorun.inf. For more use 'read3', 'read4' etc.

You may be aware that as from version 4.x, Adobe Reader can also be run from CD. This means that you can provide the user with a way of opening the Browser's "Quick Start guide" which is provided in PDF format - without assuming the user has Acrobat installed.

```
shell\read1\command=notepad.exe readme.txt
shell\read1=Read M&e First
shell\readit2\command=acrobat\reader\acrord32.exe
portbrws\qsg.pdf
shell\readit2=Read Quick Start Guide (PDF)
```

Note: the shell\readit2\command line is typed all as one line with a space between the 2 paths.

To find out more about running Acrobat Reader from CD, see my (free) PDF on the subject at www.yeardley.demon.co.uk .

If you want to do more with your autorun.inf, consult the online Microsoft Knowledge Base and search for "AutoPlay". You can test the AutoPlay function by placing the autorun.inf on the root of one of your hard drives, then double click the drive icon as for a CD. I would not recommend using C: if you only have the one hard drive. You can also make floppy, Zip, Jaz drives etc. work as well which is described in MS KB article #Q136214 "How to Test Autorun.inf Files". This does involve a Windows Registry edit - not recommended to those unfamiliar with the Registry.

For utilities that extend AutoPlay functionality without requiring programming knowledge see Pollen Software's programs (www.pollensoftware.com).

What if AutoPlay has been disabled?

Users, or more likely IT staff, may disable Windows' AutoPlay feature. You can't do anything automatically with your CD to re-enable AutoPlay as the user's PC will not read the autorun.inf file. In the next section I include tips to get round this problem.

However you can get the user to re-enable AutoPlay. It is only a check box but the trick is finding it. In Windows 98 use Start->Help, select the Index tab and type "To make CDs play automatically when inserted in the CD drive" and you will be given step by step help.

Alternatively (both Windows 95 and 98)

- Click **Start->Settings->Control Panel** and double-click the **System** icon
- Select the **Device Manager** tab of the **System Properties** dialog box.
- Click the plus sign next to **CD-ROM**, right-click the device you want to use, and then click **Properties**.
- Click the **Settings** tab.

- Select the **Auto insert notification** check box. The checkbox is ticked for 'On' and clear for 'Off'

I don't have the details for NT but it should not be dissimilar except that you may need to pay attention to the degree of user permissions allowed and you may need an administrator to achieve the change.

Other Considerations

You should consider putting a "ReadMe" text file in the root of your CD. A primary purpose is to help users who may be having a problem running the CD's contents, so you will aid them by making sure the file (or a copy of it) is in basic text form, i.e. .TXT extension. Check you can read it in Notepad. Things to include in it are:

- Brief description of what is on the CD.
- Explain how to open the Portfolio Browser on the CD and that it can be used to read the Catalog(s) on the CD.
- Explain that using the Browser on the CD will reset their PC's association of FDB files to use Browser rather than the full Portfolio app. To reset the association, they should open the full app and then open an FDBs - the association is now reset.
- The location of any installers, e.g. a demo version of Portfolio.
- Any special instructions.
- How to enable AutoPlay
- A contact or technical support number in case users have problem or an error to report. Also consider URLs (web addresses) for Extensis.

Note that if you call the on-CD version of Browser without an FDB file as well, it opens looking at the root of the CD. Thus, especially for those with less experience, there is much to be said for putting any/all your TXT and FDB info and index files on the root of the CD. This aids both the person who is looking at the CD in Explorer or whom has managed to open the Browser on the CD but does not know where the content files reside.

Shortcuts on the CD. This is not possible - the shortcut file needs a drive letter for the CD drive and this will differ from PC to PC

Likely errors when testing your autorun.inf

Always refresh Explorer (press F5 key with Explorer or 'My computer' window open) before re-testing. There are three common errors that occur:

- Windows dialog captioned "Program not found" saying it can't find 'portbrws.exe'. Check the syntax of the path to the Browser exe file in 'open='. Most likely you have started the path with a backslash when none is required.
- Browser opens and gives one or both of the following " (path\name of your Catalog) Cannot find this file. Please verify that the correct path and filename are given." Check your FDB path statement - you are probably using folder/file names with spaces in them without enclosing the path with double quotes("").
- No icon or wrong icon. Check the 'icon=' path and ensure there is no opening backslash. If the icon is wrong, check the icon number (they start at 0 not 1 as you might assume.)

How do I create an AutoPlay CD for Macs?

Answer: you don't. This is because:

- it is not the style on the Mac.
- many Mac users turn this off, as a serious virus was once spread that way.

The Mac style is to automatically open a folder when the CD-ROM is inserted, containing icons that do obvious things. Using Adaptec's Toast (a Mac CD making program), it is just a matter of having the appropriate window open for the source partition when you set up to burn the CD. Don't forget to keep the folder window small and top left of screen to allow for users running on at lower screen resolution.

This may be less easy to achieve authoring hybrid CDs from the PC and will depend on your utilities and degree of access to a Mac to set-up the Mac files and folders. For a greater discussion of CD formats and cross-platform issues see my PDF about running Acrobat Reader from CD.